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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/551,736

02/28/2007

Adel S. Al-Misfer

207.221

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38137 7590 08/03/2011
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EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT

PAPER NUMBER

2855

MAIL DATE

DELIVERY MODE

08/03/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/551,736 | Applicant(s) AL-MISFER, ADEL S. | |
| | Examiner GAIL VERBITSKY | Art Unit 2855 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-38, 41-45 and 47-59 is/are pending in the application.
- 4a) Of the above claim(s) 47-59 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-38 and 41-45 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 47-59 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Restriction by Original Presentation

Newly submitted Invention, claims 47-59, is directed to a system for loading that is independent or distinct from the invention originally claimed for the following reasons:

a) the originally claimed invention, i.e., claims 33-38, 41-45, is directed to a device/method that does not require calculating **a value representing the current volume or level of molten metal within the container based on physical properties of the container**, as stated in claim 47.

c) the originally claimed invention is classified in class 374, subclass 54.

d) the invention stated in new claims 47-59 is classified in class 73.

Since Applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for further prosecution on the merits. Accordingly, claims 47-59 are withdrawn from consideration as being directed to non-elected invention. See 37 CFR and MPEP 821.03.

Allowable Subject Matter

Claims 33-38, 41-45 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 47-59 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Gulla et al. (U.S. 3882967) discloses a device for sensing a level/ volume of a fluid in a container by using a plurality of temperature-sensing junctions arranged along the heights of the container. A processor is arranged/ programmed to sense the level of the fluid by sensing the temperature of the fluid when the fluid reaches a respective sensor and opens/ closes a valve 17 allowing delivery of the fluid in the container. At a critical temperature (greater than a predetermined temperature), sensed by a temperature sensing junction (first), a threshold switch 10 will give off a switching signal to a signal transmitter 11 to control the valve (col. 3, lines 50-53).

Gulla does not disclose a molten material contained with a loading arm, as claimed by applicant.

JP 62261928 A discloses a plurality of temperature sensing devices 3(1) – 3(n) wherein when a liquid level in a tank/ container fluctuates, the sensor 3(1) is in a vapor phase

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and sensor 3(n) is in a liquid phase. JP teaches to compute mean/ average normalized temperature. There is a function between the liquid level and the mean/ average temperature. It is inherent that the temperature of a temperature sensor could be compared with the mean/ average temperature.

Yuki et al. (U.S. 5385200) [hereinafter Yuki] discloses a device in the field of applicant's endeavor comprising obtaining a molten metal temperature by measuring thermocouple and comparing the temperature with a predetermined temperature.

Kempf et al. (U.S. 6059453) [hereinafter Kempf] discloses the device in the field of applicant's endeavor comprising a thermocouple or RTD probe rod for measuring a liquid temperature, the probe having a housing/ terminal head resting on its edge 22 on the container (mounting ring 16 welded to the container) with the liquid, as shown in Fig. 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gail Verbitsky whose telephone number is 571/ 272-2253. The examiner can normally be reached on 7:30 to 4:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571/ 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Gail Verbitsky
Primary Patent Examiner, TC 2800

July 25, 2011
/Gail Verbitsky/
Primary Examiner, Art Unit 2855